

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of

Amendment of Parts 2, 21 and 94
of the Commission's Rules to
Accommodate Private Microwave
Systems in the 1.71-1.85 GHz Band
and in Bands Above 3 GHz

RM-7981

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Commission

COMMENTS OF HARRIS CORPORATION
FARINON DIVISION

The Farinon Division of Harris Corporation (Harris) hereby submits its Comments in support of the above-referenced petition.

Harris is a Florida corporation with its headquarters located in Melbourne, Florida. Through its Farinon Division, located in San Carlos, California, Harris designs, develops and manufactures microwave equipment for terrestrial fixed microwave systems. As a leading manufacturer of equipment used in terrestrial fixed microwave equipment, Harris is interested in facilitating maximization of use of those frequency bands allocated to the fixed terrestrial services and ensuring that there is sufficient spectrum available to accommodate demand for terrestrial fixed microwave facilities. Harris offers both analog and digital product lines with bandwidths ranging from 800 or 1600 KHz to 3.5 MHz, 5.0 MHz, 10 MHz and wider.

Briefly, Harris agrees with UTC that the Commission should defer action in its pending rule making proceeding in ET Docket No.

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92-9¹ until it adopts the technical and coordination rules needed to make additional spectrum available for new and displaced private microwave systems. Harris also agrees with UTC that the Commission should establish an industry advisory committee to develop new technical requirements and interference standards for the use of the 3.7-4.2, 5.925-6.425, and 10.7-11.7 GHz bands by private microwave users. Such an industry advisory committee should also study the uses of the 3.6-3.7, 6.525-6.875 and 10.55-10.68 GHz bands as proposed by Alcatel Network Systems, Inc., in its Petition for Rule Making filed on May 22, 1992.

HARRIS SUPPORTS UTC'S PROPOSAL
FOR A SEPARATE PROCEEDING

Harris-Fariron agrees with UTC's argument that the Commission's proposals in ET Docket No. 92-9 are inadequate to accommodate the microwave systems now operating in the 1.8-1.9 and in the 2.1-2.2 GHz band. Moreover, as noted by UTC, ET Docket 92-9 makes no provision for accommodating new microwave systems or for the expansion of existing 2 GHz systems. While the Commission has proposed to adopt a "blanket" waiver of eligibility for the "higher frequency microwave bands," the configuration of those bands makes them generally unsuitable for many of the operations now conducted in the 1.8-1.9 and the 2.1-2.2 GHz bands. Thus, for example, while the channelization of the 1.8-1.9 GHz private microwave band is

¹ These comments should not be taken as an indication that Harris supports the Commission's basic proposal in ET Docket 92-9. Harris will discuss its view on that proposal in comments Harris plans to file in that proceeding.

comparable to that of the private microwave band 6.525-6.875 MHz, it is not comparable at all to the de facto channelization of the 3.7-4.2 or 5.925-6.425 GHz common carrier bands. Those bands have been designed to accommodate systems with much larger capacity than the capacity of private systems operating in the 1.8-1.9 GHz band. Therefore, unless those bands are reconfigured, they may not be suitable, or indeed available, to private 2 GHz licensees or to new private microwave applicants. Further, because common carrier users have been migrating to higher capacity facilities, such as fiber, the re-channelization of the common carrier 4 and 6 GHz bands would be appropriate and timely.

It would be even more difficult to accommodate existing 2.1 and 2.2 GHz band users in the "higher" bands as currently configured. The two private bands at 2 GHz, i.e., 2130-2150 and 2180-2200, are used for "skinny" routes with 800 kHz bandwidth channels regularly assignable, and 1.6 MHz on a showing of need. As UTC pointed out, there are only nine (9) pairs of channels with comparable bandwidth in the 6.5-6.8 GHz private microwave band which is not enough to re-accommodate existing systems in the 2.1-2.2 GHz private microwave bands, let alone new users.

The common carrier 2 GHz bands, i.e., 2110-2130 and 2160-2180 MHz, are also heavily used for relatively low capacity systems operating within 0.8 to 3.5 MHz channels. While some of these relatively low capacity systems can be accommodated under existing rules in some portions of the higher common carrier bands, reconfiguration of these bands will make them useful to private as

well as to low capacity common carrier systems.

In sum, new channelization plans and comparable technical and coordination standards should be adopted before the "higher" bands are made available to accommodate migration of the 2 GHz systems. Otherwise, those bands could be occupied by a hodge podge of incompatible systems. Therefore, Harris agrees with UTC's proposal that the Commission should defer further action in ET Docket 92-9 until the Commission reconfigures the "higher" bands and adopts suitable technical standards. Harris will be prepared to recommend detailed technical proposals, including channelization of those bands, upon the initiation of such a proceeding. A preliminary possible channelization of the 3.5-3.7 and 5.9-6.4 GHz is attached.

Should the Commission determine to make the Federal Government band 1.7-1.85 MHz available to non-government users, which Harris-Farion also recommends, the Commission might want to consider the attached channelization plans for that band as well.

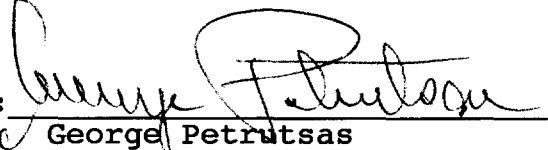
A new rule making proceeding dealing with the issues and proposals in the UTC petition, the proposals in the petition filed on May 22, 1992, by Alcatel Network Systems, Inc., reconfiguration of the common carrier bands in question and reallocation for government/non-government sharing of the 1.71-1.86 and 3.5-3.7 GHz, or portions thereof would be the desirable. Therefore, Harris agrees with UTC that the Commission institute such a proceeding as soon as possible.

AN INDUSTRY ADVISORY COMMITTEE
SHOULD BE ESTABLISHED

Finally, Harris agrees with UTC's recommendation that the Commission establish an industry advisory committee to develop specific recommendations on channelization, eligibility, sharing and interference protection standards for the "migration" bands. The complexity of the technical issues involved can best be addressed by such an industry advisory committee which can then make the appropriate recommendations to the Commission in the context of the separate proceeding proposed by UTC.

Respectfully submitted,

HARRIS CORPORATION -- FARINON
DIVISION

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APPENDIX

Potential Channelization
Plans for the
1710-1850, 3500-3700, and
5925-6405 MHz bands

Possible 1710-1850 MHz Channelization

1710-1760 Mobile, shared with PCS

<u>10 MHz BW</u>	<u>5 MHz BW</u>
1765 - 1815	1762.6 - 1812.5
1775 - 1825	1767.5 - 1817.5
1785 - 1835	1772.5 - 1822.5
1795 - 1845	1777.5 - 1827.5
	1782.5 - 1832.5
<u>2.5 MHz BW</u>	1787.5 - 1837.5
1793.75 - 1843.75	1792.5 - 1842.5
1796.25 - 1846.25	
1798.75 - 1848.75	

Possible 3500-3700 MHz Channelization

<u>10 MHz BW</u>	<u>5 MHz BW</u>
3510 - 3590	3505 - 3585
3520 - 3600	3515 - 3595
3530 - 3610	3525 - 3605
3540 - 3620	3535 - 3615
3550 - 3630	3545 - 3625
3560 - 3640	3555 - 3635
3570 - 3650	3565 - 3645
	3575 - 3655

2.5 MHz BW

3502.5 - 3582.5
3507.5 - 3587.5
3512.5 - 3592.5
3517.5 - 3597.5
3522.5 - 3602.5
3527.5 - 3607.5
3532.5 - 3612.5
3537.5 - 3617.5

1.25 MHz BW

3605.00 - 3685.00
3606.25 - 3686.25
3607.50 - 3687.50
3608.25 - 3688.75
3610.00 - 3690.00
3611.25 - 3691.25
3612.50 - 3692.50
3613.75 - 3693.75
3615.00 - 3695.00
3616.25 - 3696.25
3617.50 - 3697.50
3618.75 - 3698.75

5925-6425 MHz Allocations

a) 30 MHz Bandwidths

Transmit (Receive)

5974.8
6004.5
6034.2
6063.8
6093.5
6123.1
6152.8

Receive (Transmit)

6226.8
6256.5
6286.2
6315.8
6345.5
6375.2
6404.8

b) 10 MHz Bandwidths

Transmit (Receive)	Receive (Transmit)
5930.0	6182.0
5940.0	6192.0
5950.0	6202.0
5960.0	6212.0

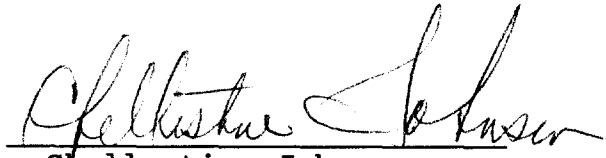
c) 5 MHz Bandwidths

Transmit (Receive)	Receive (Transmit)
5927.5	6179.5
5932.5	6184.5
5937.5	6189.5
5947.5	6199.5
5952.5	6204.5
6170.1	6422.1

CERTIFICATE OF SERVICE

I, Chellestine Johnson, a secretary in the law firm of Fletcher, Heald & Hildreth, do hereby certify that a copy of the foregoing Comments of Harris Corporation-Farion Division, was sent this 1st day of June, 1992, by first-class United States mail, postage prepaid, to:

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